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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,923	02/27/2004	Josef Chalupper	P04,0042	8887

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SCHIFF HARDIN, LLP
PATENT DEPARTMENT
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EXAMINER	
ENSEY, BRIAN	
ART UNIT	**PAPER NUMBER**
2615	

DATE MAILED: 04/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/789,923	CHALUPPER, JOSEF	
	Examiner	Art Unit	
	Brian Ensey	2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 February 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *6/23/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

Claim 14 is objected to because of the following informalities: There is a period after "wirelessly" in line 2 of claim 14. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Levitt et al. U.S. Patent no. 4,731,850.

Regarding claim 1, Levitt discloses a method to adjust a hearing device, comprising: inputting a desired setting value in the hearing device at a determinable point in time (upon power up the program parameters are transferred to the RAM from the EEPROM, see col. 5, lines 35-37); measuring at least one sound quantity concerning a first environment situation at the determinable point in time (microphone 57 continuously monitors the listening situation); automatically learning setting values to be used, depending on the desired setting value and the at least one measured sound quantity (speech level detector 96, bandpass filters 97-100 and a level detector with four comparators 101-104 continuously monitor the acoustic environment based on the initially measured sound quantity, see col. 5, lines 60-66); newly measuring at least one

sound quantity concerning a second environment situation (when a change in the listening environment occurs, the speech level detector 96, bandpass filters 97-100 and a level detector with four comparators 101-104 evaluate the environment and compare the changes with the initially measured sound quantity, see col. 6, lines 22-45); and adjusting the hearing device to one of the setting values to be used with regard to the second environment situation (the parameters of the listening situation are automatically changed to a new optimum set of values based on the second environmental situation, see col.6, lines 46-53).

Regarding claim 2, Levitt further discloses at least one measured sound quantity represents a minimum or maximum sound pressure level in a frequency channel (microphone 57 is used to monitor sound pressure and the frequency is typically monitored in four band widths, see col. 5, line 67 to col. 6, line 1. It is inherent that both a minimum and maximum sound pressure in each frequency band is measaured) or a modulation depth.

Regarding claim 3, Levitt further discloses the setting value concerns an amplification or compression (Parameter values, specified in terms of both amplitude and phase characteristics are determined for the patient as a function of speech level, see col. 2, lines 40-46).

Regarding claim 4, Levitt further discloses disclose learning ensues via temporal weighting of learning steps (The measured quantity is continuously monitored and the learning steps are weighted based on the frequency band and magnitude of the measured quantity and the level detector generates a two bit coefficient of the average signal level to set the frequency response of the programmable filter in accordance with the changing environmental situation, see col. 5, line 60 to col. 6, line 53 and col. 11, lines 16-31).

Regarding claim 5, Levitt further discloses the learning steps ensue according to at least one of: a) at predetermined points in time; and b) in a predetermined number (The speech detector is periodically clocked by an oscillator divider 96 to continuously learn the measured quantity and update the setting values, see col. 6, lines 9-22).

Regarding claim 6, Levitt further discloses the learning steps ensue upon demand of a hearing aid user (The hearing aid is programmed with a host computer 20 and the parameters are selected to fit the user based on feedback from the user, see col. 6, line 54 to col. 7, line3).

Regarding claim 7, Levitt discloses a device to adjust a hearing device (See col. 4, line 62 and 63), comprising: an input device configured to input a desired setting value in the hearing device at a determinable point in time (upon power up the program parameters are transferred to the RAM from the EEPROM, see col. 5, lines 35-37); a measurement device (microphone 57 continuously monitors the listening situation) configured to measure at least one sound quantity concerning a first environment situation at the determinable point in time (speech level detector 96, bandpass filters 97-100 and a level detector with four comparators 101-104 continuously monitor the acoustic environment based on the initially measured sound quantity, see col. 5, lines 60-66) and at least one sound quantity concerning a second environment situation (when a change in the listening environment occurs, the speech level detector 96, bandpass filters 97-100 and a level detector with four comparators 101-104 evaluate the environment and compare the changes with the initially measured sound quantity, see col. 6, lines 22-45); and a computing device configured to automatically learn setting values to be used, dependent on the desired setting value and the at least one measured sound quantity, wherein one of the setting values concerns the second environment situation, and can be output at an output of the computation

device (the parameters of the listening situation are automatically changed to a new optimum set of values based on the second environmental situation, see col.6, lines 46-53).

Regarding claim 8, Levitt further discloses the input device comprises at least one of a volume controller, a remote control, and a speech input unit (microphone 57).

Regarding claim 9, Levitt further discloses at least one measured sound quantity represents a minimum or maximum sound pressure level in a frequency channel (microphone 57 is used to monitor sound pressure and the frequency is typically monitored in four band widths, see col. 5, line 67 to col. 6, line 1. It is inherent that both a minimum and maximum sound pressure in each frequency band is measaured) or a modulation depth.

Regarding claim 10, Levitt further discloses the setting value concerns an amplification or compression (Parameter values, specified in terms of both amplitude and phase characteristics are determined for the patient as a function of speech level, see col. 2, lines 40-46).

Regarding claim 11, Levitt further discloses disclose learning ensues via temporal weighting of learning steps (The measured quantity is continuously monitored and the learning steps are weighted based on the frequency band and magnitude of the measured quantity and the level detector generates a two bit coefficient of the average signal level to set the frequency response of the programmable filter in accordance with the changing environmental situation, see col. 5, line 60 to col. 6, line 53 and col. 11, lines 16-31).

Regarding claim 12, Levitt further discloses the learning steps ensue according to at least one of: a) at predetermined points in time; and b) in a predetermined number (The speech detector is periodically clocked by an oscillator divider 96 to continuously learn the measured quantity and update the setting values, see col. 6, lines 9-22).

Regarding claim 13, Levitt discloses a hearing device with an adjustment device (See col. 11, lines 39-45), the adjustment device comprising: an input device configured to input a desired setting value in the hearing device at a determinable point in time (upon power up the program parameters are transferred to the RAM from the EEPROM, see col. 5, lines 35-37); a measurement device (microphone 57 continuously monitors the listening situation) configured to measure at least one sound quantity concerning a first environment situation at the determinable point in time (speech level detector 96, bandpass filters 97-100 and a level detector with four comparators 101-104 continuously monitor the acoustic environment based on the initially measured sound quantity, see col. 5, lines 60-66) and at least one sound quantity concerning a second environment situation (when a change in the listening environment occurs, the speech level detector 96, bandpass filters 97-100 and a level detector with four comparators 101-104 evaluate the environment and compare the changes with the initially measured sound quantity, see col. 6, lines 22-45); and a computing device configured to automatically learn setting values to be used, dependent on the desired setting value and the at least one measured sound quantity, wherein one of the setting values concerns the second environment situation, and can be output at an output of the computation device (the parameters of the listening situation are automatically changed to a new optimum set of values based on the second environmental situation, see col.6, lines 46-53).

Regarding claim 14, Levitt discloses an adjustment system with an adjustment device to which a hearing device can be connected via wires or wirelessly (See col. 11, lines 39-45), the adjustment device comprising: an input device configured to input a desired setting value in the hearing device at a determinable point in time (upon power up the program parameters are

transferred to the RAM from the EEPROM, see col. 5, lines 35-37); a measurement device (microphone 57 continuously monitors the listening situation) configured to measure at least one sound quantity concerning a first environment situation at the determinable point in time (speech level detector 96, bandpass filters 97-100 and a level detector with four comparators 101-104 continuously monitor the acoustic environment based on the initially measured sound quantity, see col. 5, lines 60-66) and at least one sound quantity concerning a second environment situation (when a change in the listening environment occurs, the speech level detector 96, bandpass filters 97-100 and a level detector with four comparators 101-104 evaluate the environment and compare the changes with the initially measured sound quantity, see col. 6, lines 22-45); and a computing device configured to automatically learn setting values to be used, dependent on the desired setting value and the at least one measured sound quantity, wherein one of the setting values concerns the second environment situation, and can be output at an output of the computation device (the parameters of the listening situation are automatically changed to a new optimum set of values based on the second environmental situation, see col.6, lines 46-53).

Conclusion

The Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group **Art Unit 2615**.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Ensey whose telephone number is 571-272-7496. The examiner can normally be reached on Monday - Friday 6:30 AM - 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
P.O. Box 1450
Alexandria, Va. 22313-1450

Or faxed to:

(571) 273-8300, for formal communications intended for entry and for informal or draft communications, please label "PROPOSED" or "DRAFT".

Hand-delivered responses should be brought to:

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Randolph Building
401 Dulany Street
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SINH TRAN
SUPERVISORY PATENT EXAMINER

BKE
March 30, 2006